

## Building Understanding for Slope and the Y-Intercept

Nutritional Facts		
Sandwich	Saturated Grams of Fat	Total Grams of Fat
Arby's Roast Beef Sandwich with Cheddar Cheese	5	12
A&W Root Beer Cheeseburger	9	22
Sonic Angus Hickory Cheeseburger	16	41
Burger King DOUBLE WHOPPER W/ Cheese Sandwich	18	49
Sonic Bacon Cheeseburger	16	48
McDonald's Quarter Pounder	7	19
Burger King Triple Whopper	27	76
McDonald's Hamburger	3.5	9
Hardee's 2/3 lb. Bacon Cheeseburger	38	97
Jack in the Box Bacon Ultimate Cheeseburger	30	77
Burger King - BK Quad Stacker	30	70
Wendy's Triple w/Everything Cheeseburger	27	60
Dairy Queen-DQ Original Double Cheeseburger	18	34

- In a group have part of the group use their Communicator® while the other part uses their graphing calculator.
- Both groups will set up the axes so  
saturated fat – x axis  
total fat – y axis
- Does the graph show a linear pattern?
- On the communicator® select the two points (5,12) and (30,77) and draw a line through these two points.
- Calculate the slope of this line.
- Write the equation of the line in the form  $y=mx$ . Enter this equation on the calculator.
- Adjust the y-intercept using the intercept form for a straight line:  $y=a+mx$ . Adjust the a value by tenths.
- What is the real-world meaning of the y-intercept?
- What is the real world meaning for the slope?
- Predict the total fat in a burger with 20 grams of saturated fat.
- Predict the saturated fat in a burger with 765 grams of fat.